# **VOLUME CONTENTS**

Volume 236

No. 1

# Special Issue:

# LABORATORY RESEARCH FOR PLANETARY ATMOSPHERES

Proceedings of the Sixth International Conference on Laboratory Research for Planetary Atmospheres, Bethesda, Maryland, USA, 30 October, 1994

#### Guest Editor:

### KENNETH FOX

Publisher's Note vii Foreword 1-2 KENNETH FOX / Sixth International Conference on Laboratory Research for Planetary Atmospheres 3-10
KENNETH FOX / Sixth International Conference on Laboratory Research for Planetary Atmospheres 3-10
Planetary Atmospheres 3–10
a similar of the same of the s
JOSHUA B. HALPERN, YUHUI HUANG and TATIANA TITARCHUK / Radiative
and Collisional Processes in CN A <sup>2</sup> II, 11–17
J.B. HALPERN, RALF DOPHEIDE and HELMUT ZACHARIAS / Preparation,
Collisional Decay and Transfer of Alignment in C <sub>2</sub> H <sub>2</sub> 2 <sup>1</sup> 19-27
WILLIAM M. JACKSON, VICTOR BLUNT, HUA LIN, MARTINA GREEN,
GREGORY OLIVERA, WILLIAM H. FINK, YIHAN BAO, RANDAL S.
URDAHL, FIDA MOHAMMAD and MANSOUR ZAHEDI / Non-Adiabatic
Interactions in Excited C <sub>2</sub> H Molecules and Their Relationship to C <sub>2</sub> Formation in
Comets 29-47
RAFAEL NAVARRO-GONZÁLEZ and ALFREDO ROMERO / On the Sur-
vivability of an Enantiomeric Excess of Amino Acids in Comet Nuclei During the
Decay of <sup>26</sup> A1 and Other Radionuclides 49–60
VLADIMIR A. BASIUK and RAFAEL NAVARRO-GONZÁLEZ / Dust Particles in
the Atmospheres of Terrestrial Planets and Their Roles for Prebiotic Chemistry:
An Overview 61–75
A.S. SHARMA and G.M. MILIKH / Thermal Instability and Transport Effects in
Comets 77–84
Y. BÉNILAN, D. ANDRIEUX, M. KHLIFI, P. BRUSTON, F. RAULIN, JC.
GUILLEMIN, C. COSSART-MAGOS / Temperature Dependence of HC <sub>2</sub> N,
C <sub>6</sub> H <sub>2</sub> , and C <sub>4</sub> N <sub>2</sub> MID-UV Absorption Coefficients. Application to
the Interpretation of Titan's Atmospheric Spectra 85-93
KULDIP SINGH and JAMES J. O'BRIEN / Absorption Coefficients for the 727 NM
Band of Methane At 77 K Determined by Intracavity Laser Spectroscopy 97–109

DAVID R. DEBOER and PAUL G. STEFFES / The Georgia Tech High Sensitivity	
Microwave Measurement System	111-124
R. DAHMANI and R.K. KHANNA / H <sub>2</sub> O on Io? IR Spectra of SO <sub>2</sub> /H <sub>2</sub> O Mixed Ices	
in the 5000-450 cm <sup>-1</sup> Region	125-133
List of forthcoming papers	135
The 'Kluwer' LaTeX Style File	137–138
No. 2	
C. KIM / The Effective Temperatures, Radii and Masses of Dwarf Cepheids	139-154
H.M. MACHALI, M.H. HAGGAG and A.R. DEGHEIDY / Diffuse Reflection and Transmission of Solar Radiation by a Finite Atmosphere Bounded by a Reflecting	
Surface	155–166
A.A. UBACHUKWU / The Angular Size-Redshift Relation and the Unified Scheme	
for Radio-Loud Quasars	167–174
P.S. GORAYA and N.S. TUR / Spectrophotometric Study of Four Bright Be Stars	175–183
L.I. MASHONKINA and L. ZAČS / On the Problem of Selective Enhancement of	105 100
Barium in the Atmospheres of BaII Stars	185–199
J.C. YONG, S.H. OH and K. MIN / Magnetic Reconnection Induced by Kelvin	201 211
Helmholtz Instability	201–214
E. BUDDING, C.J. BUTLER, J.G. DOYLE, P.B. ETZEL, K. OLÁH, M. ZEILIK and	
D. BROWN / Basic Stellar Parameter Determination for Active Cool Eclipsing Binaries	215-227
R.C. ADAMS, J.M. COHEN and J.C. PETERSON / A Model of an Exploding.	213-221
Radiating Star in General Relativity	229-256
R. WAGENBLAST and D.A. WILLIAMS / Revised Chemical Models of $\zeta$ Oph	229-230
Based on HST Data	257-265
A.D. SEDRAKIAN / Neutron-Phonon Interaction in Neutron Stars: Phonon Spectrum	231-203
of Coulomb Lattice	267-276
J.K. SINGH and S. RAM / Plane-Symmetric Mesonic Viscous Fluid Cosmological	201-210
Model	277-284
Letters to the Editor:	a / , 20 (
Ch.E. RYTER / Interstellar Extinction from Infrared to X-Rays: An Overview	285-291
J. ANOSOVA, J. COLIN and L. KISELEVA / Triple Star Systems as Producers of	
High Velocity Stars in the Galaxy	293-294
V. SKALSKÝ and M. SÚKENÍK / Fundamental Physical Constants, Quark Models	
and Final Parameters of the Universe	295-298
Book Reviews:	
D. Koester & K. Werner (eds.), White Dwarfs (E.J.A. MEURS)	299
W.H.G. Lewin, J. van Paradijs and E.P.J. van den Heuvel (eds.), X ray Binaries	
(JANET WOOD)	300
Brian Warner, Cataclysmic Variable Stars (T. NAYLOR)	301
List of Forthcoming Papers	303
Volume Contents	305-306
The 'KLUWER' LaTeX Style File	307-308

